

Date: Monday, 11/12/2007 11:45:41 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STEP SPACER
Job Number : 35614	
Estimate Number : 10375	
P.O. Number : <i>N/A</i>	Part Number : D30651
This Issue : 11/12/2007 S.O. No. : <i>N/A</i>	Drawing Number : D3065 REV. B
Prsht Rev. : NC	Project Number : N/A
First Issue : <i>N/A</i> Type : SMALL /MED FAB	Drawing Revision : B
Previous Run : 33821	Material : <i>N/A</i>
Written By : <i>[Signature]</i>	Due Date : 11/30/2007 Qty: 250 Um: Each
Checked & Approved By : <i>[Signature]</i>	
Comment : Est:C 02.11.01 Incorporated D3066-1 IPP KJ/RF	
Est:D 06.04.25 Water jet EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
-----	----	------------

Comment: ISSUE P.O. *5022*

GFI

CUT AND FORM PER

DRW D3065 REV.B

*C 207/11/12**(250)*

2.0	D30651	Step Spacer
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 250.0000 Each(s)

Step Spacer

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

RECEIVE AND INSPECT FOR TRANSIT DAMMAGE

ENSURE MATERIAL CERTIFICATION ATTACHED

*12/12/19**(250)*

4.0	QC6	DIMENSIONAL CHECK
-----	-----	-------------------



Comment: DIMENSIONAL CHECK

*ASP019**12/12/01**(X250)**count*

5.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
-----	-----------------	----------------------------



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

*BR**07-12-28**(250)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☐ No ☒ DQA: D Date: 08/02/04
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/12/2007 11:45:41 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP SPACER

Job Number: 35614

Part Number: D30651

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT CHEMICAL CONVERSION COAT

mf

08-01-03

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 206A

mf 08-01-03

(250)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



(250)

Comment: FINAL INSPECTION/W/O RELEASE

2008/01/04

Job Completion



mf 2008/1/4

W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

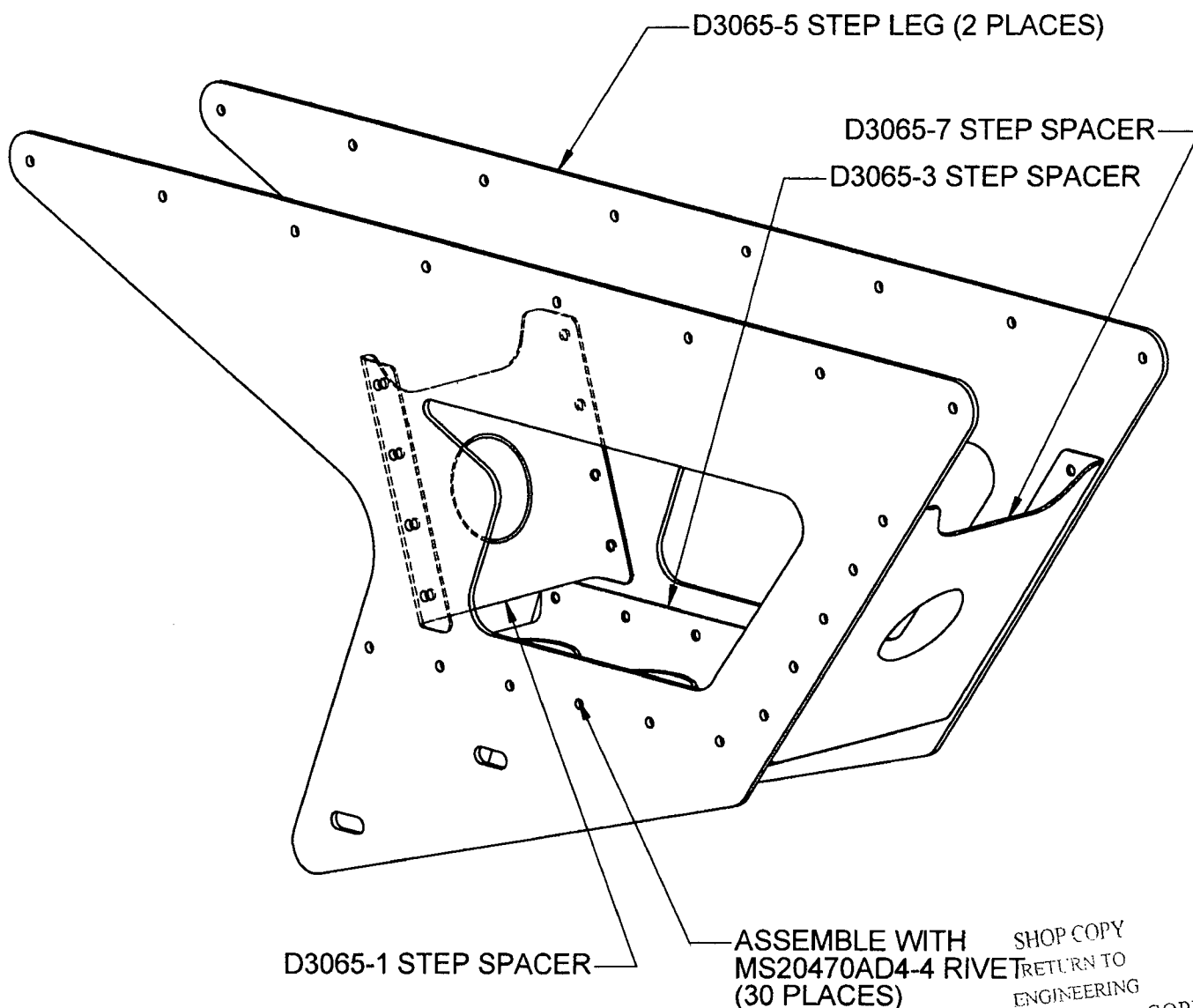
NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 1 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:2
A	02.09.11	NEW ISSUE	
B	06.05.23	ADD 6061-T6 MATERIAL, ADD SLOTS TO D3065-5	

RELEASED

06.06.20 *[Signature]*



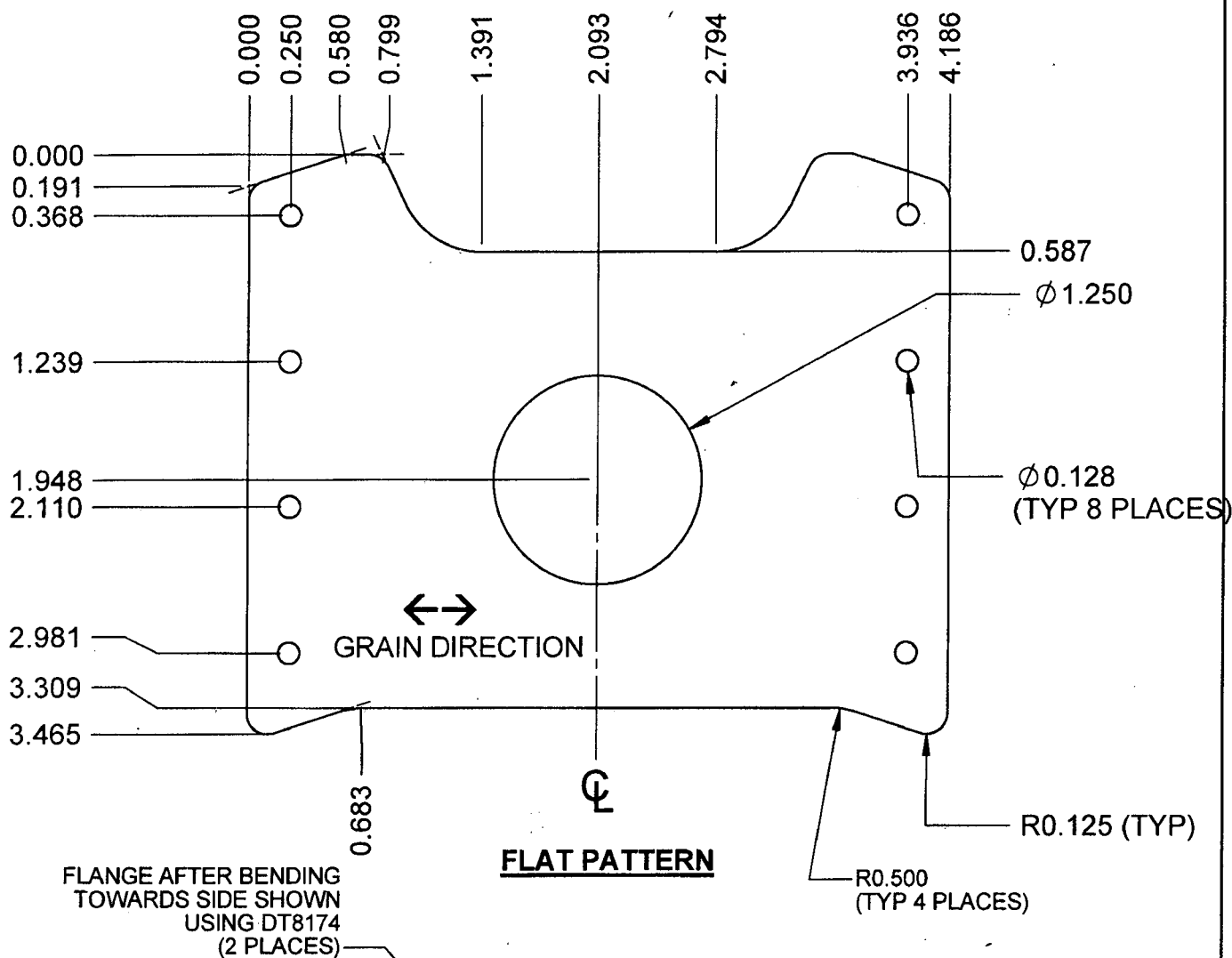
D3065-041 STEP LEG ASSEMBLY

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DATE 06.05.23		TITLE STEP LEG ASSEMBLY SCALE 1:1	



RELEASED

de de-20 - 11

D3065-1 STEP SPACER

BEND DETAIL

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M20)
2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
3) BREAK ALL SHARP EDGES 0.005 TO 0.010
4) PART IS SYMMETRIC ABOUT CENTERLINE
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
6) ALL DIMENSIONS ARE IN INCHES

125 (TYP)
T3S.040

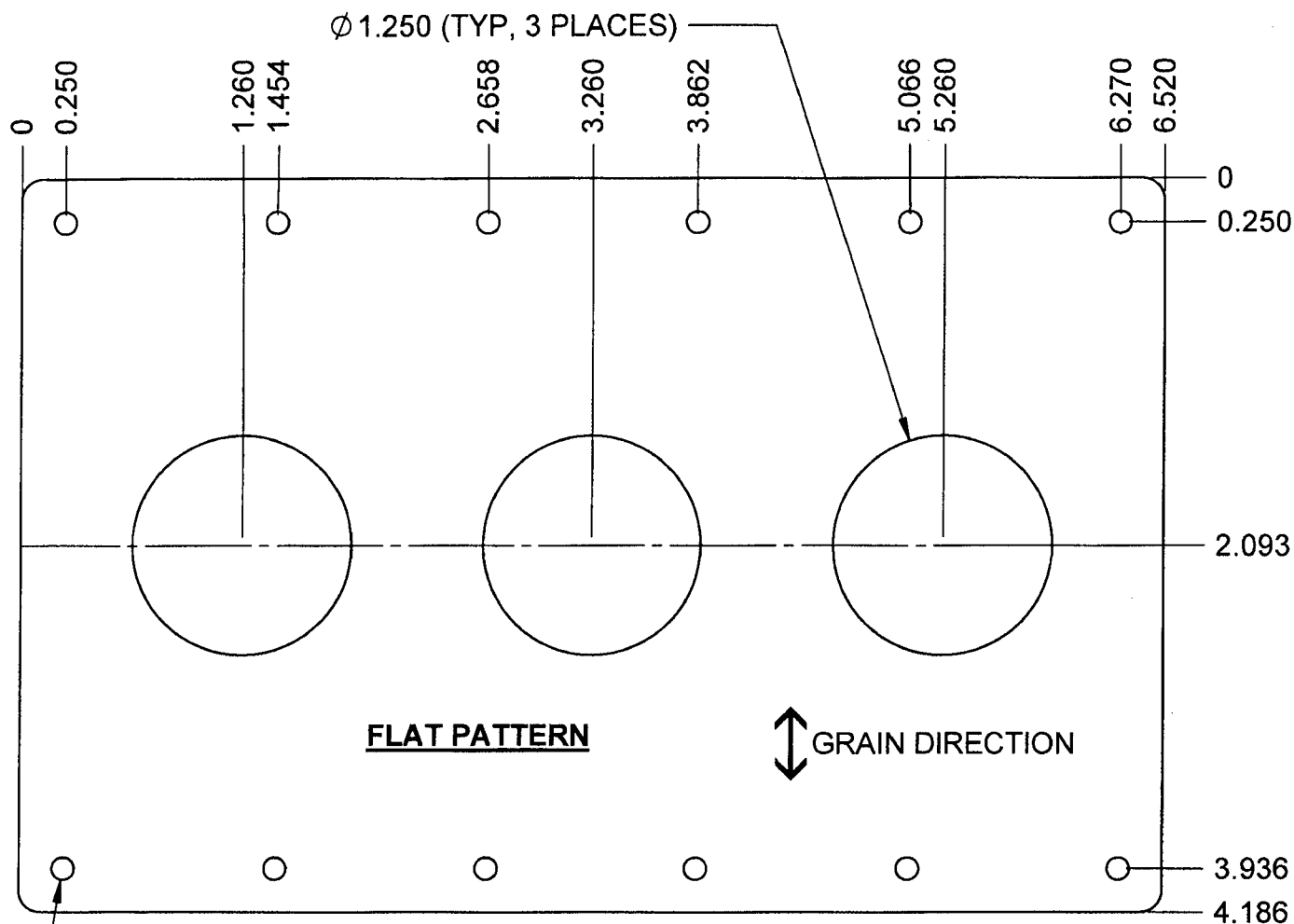
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CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 3 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:1

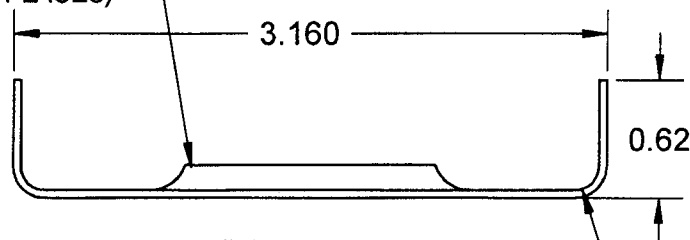


FLANGE AFTER TOWARDS SIDE
SHOWN USING DT8174 (3 PLACES)

Ø 0.129 (TYP, 12 PLACES)

RELEASED

06 06 20



BEND DETAIL

D3065-3 STEP SPACER

- 1) MATERIAL: 2024-T3 (QQ-A-250/4)
0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

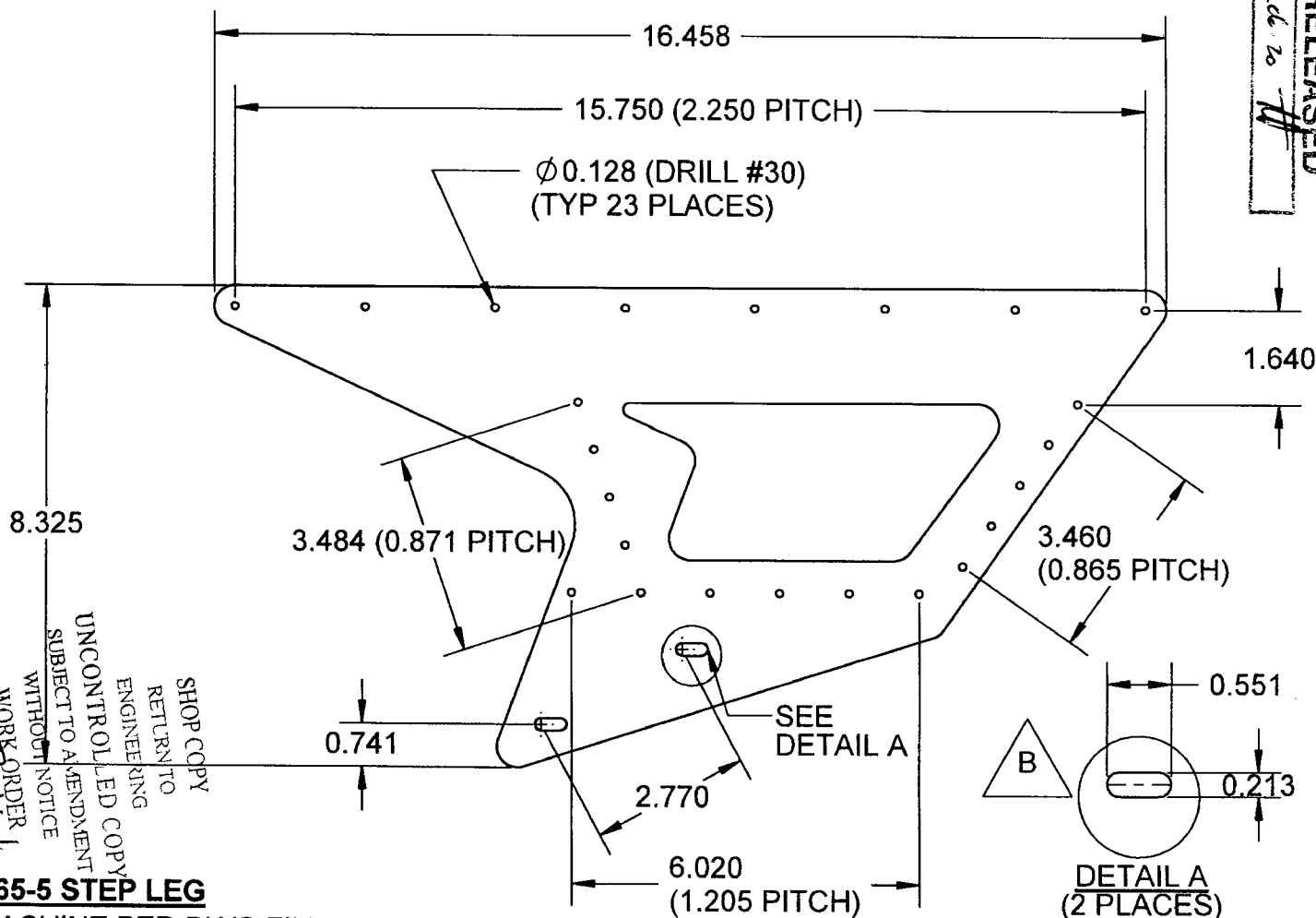
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CHECKED	<i>PH</i>	APPROVED	<i>PH</i>	DRAWING NO. D3065
DATE	06.05.23	TITLE	STEP LEG ASSEMBLY	REV. B SHEET 4 OF 5
		SCALE	1:3	

RELEASED
06.06.20 *PH***D3065-5 STEP LEG**

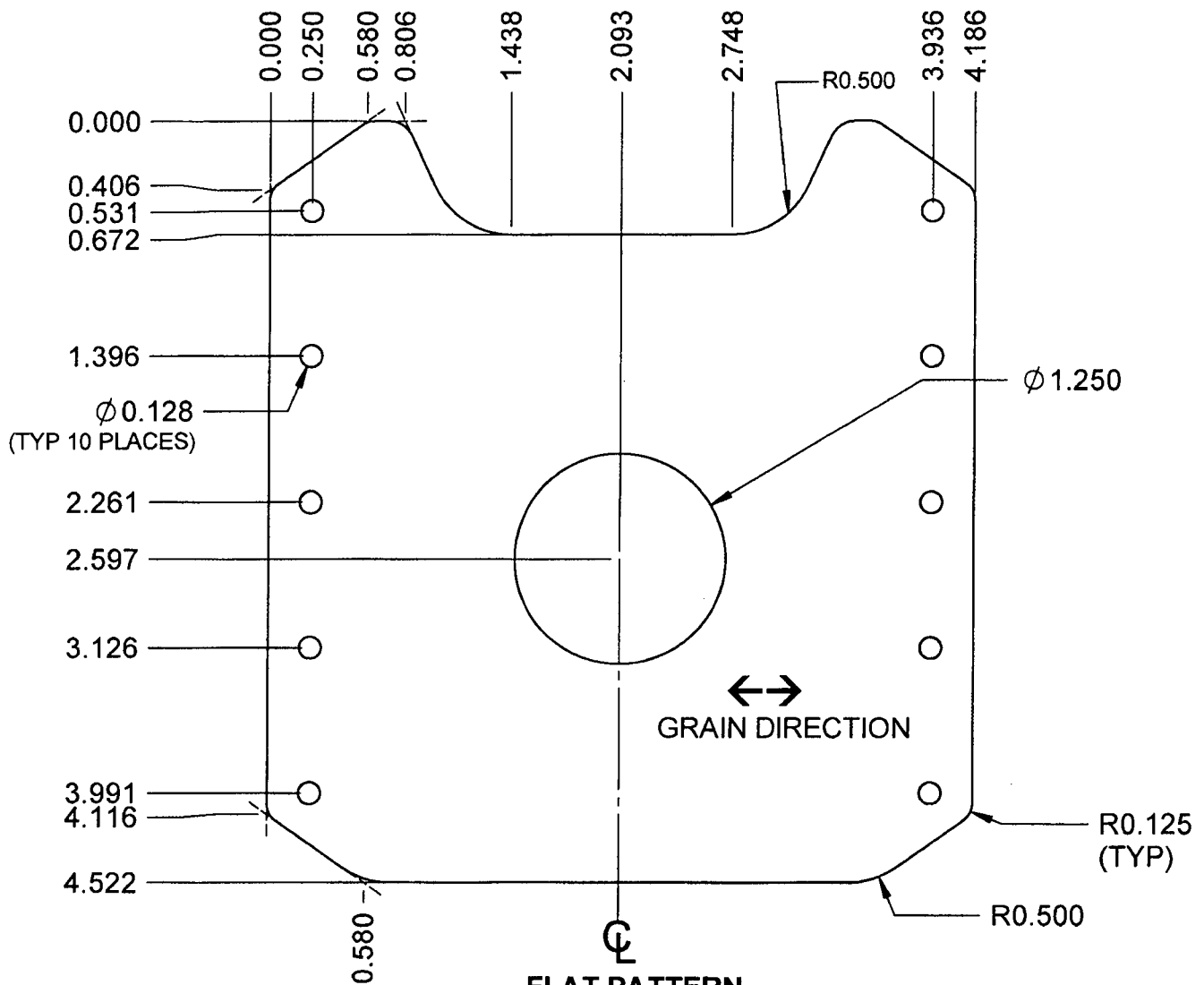
- 1) MACHINE PER DWG FILE "D3065-5.SLDPRT"
- 2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK
(REF DART SPEC M6061T6S.080)
OR
5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080)
- 3) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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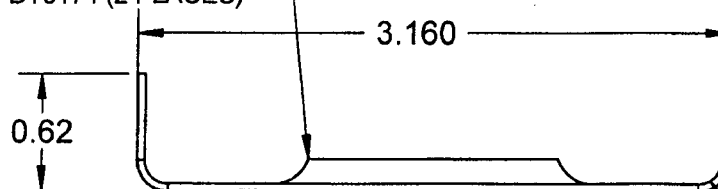
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CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3065	REV. B SHEET 5 OF 5
DATE 06.05.23		TITLE STEP LEG ASSEMBLY	SCALE 1:1



FLANGE AFTER BENDING TOWARDS
SIDE SHOWN USING DT8174 (2 PLACES)

**BEND DETAIL****RELEASED***de de re***D3065-7 STEP SPACER**

- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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180 AVENUE LABROSSE
POINTE-CLAIRE, QUÉ., CANADA H9R 1A1
TÉL.: (514) 630-4877 - FAX: (514) 630-4849

GFI est une division de Thomas & Betts Fabrication Inc. / GFI is a division of Thomas & Betts Manufacturing Inc.

VENDU À / SOLD TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON, K6A 1K7



BON DE LIVRAISON - SHIPPING MEMO

DATE DE LIVRAISON SHIPPING DATE	N° BON DE LIVRAISON SHIPPING MEMO NO.
2007/12/17	0381303

EXPÉDIÉ À / SHIPPED TO

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON, K6A 1K7

CODE DE CLIENT CUSTOMER CODE		N° DE CONTRAT JOB NO.	N° COMMANDE PO NO.	VIA SHIP VIA
DART GFI-0299		J0171920	P000005022	
QUANTITÉ QUANTITY	VOTRE N° DE PIÈCE YOUR PART NO.	DESCRIPTION		
250	D30651	STEP SPACER C OF C REQUIRED		

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

RECU PAR / RECEIVED BY

CERTIFICATE OF COMPLIANCE
CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO. 2 OUR JOB NO. J0171920 SHIPPING MEMO 0381303

ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
	<u>250 PCS</u>	<u>PO00005022</u>	<u>D30651</u>	<u>B</u>	<u>STEP SPACER</u>	<u>B</u>
MATERIAL		SUPPLIED BY			MAT. REL. NO.	
<u>AL 2024-T3 (QQ-A-250/4)</u>		<u>SAMUEL / KAISER ALUMINUM</u>			<u>H/N # 413490A4</u>	

	PROCESS	PROCESSOR	RELEASE NOTE #
1	<u>FIRST ARTICLE INSPECTION REPORT ON FILE</u>	<u>GFI</u>	<u>CONFORMS</u>
2			
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 17 DECEMBER 2007

G.F.I. Q.C. REP. Dabben H. H.





Programme d'Assurance Qualité Enregistré / Registered Q.A. Program
ISO 9001:2000 AS9100

LETTRE DE CONFORMITÉ – LETTER OF COMPLIANCE

Date: 20 NOVEMBRE 2007

Company Name: G.F.I. Division of Thomas & Betts limited
Address: 180 avenue Labrosse
City: Pointe Claire, Qué.
Zip Code: H9R 1A1

du client: 72573
Customer's order #:

de commande SSMQ: 873720
SSMQ's Order #:

La présente est pour certifier que le matériel détaillé ci-dessous est conforme aux exigences de votre commande et des normes du grade tel que décrit:

The following is to certify that the material listed below meets your order requirements and grade standards as described:

Notre/Our Item #	# de pièces/ # of pieces	Épaisseur/Grandeur Gauge/Size	Alliage/Trempe Alloy/Temper	Spécification / Specification	Lot/Heat
1	5	.040" X 48" X 144"	2024 T3	AMS-QQ-A-250/4	413490A4

Bien à vous,
Yours truly,



Miss Griffiths

Commis à l'administration.
Administration Clerk.

LES MÉTAUX SPÉCIALISÉS SAMUEL, 21525 CLARK-GRAHAM, BAIE d'URFÉ, QUÉBEC H9X 3T5
SAMUEL SPECIALITY METALS, 21525 CLARK-GRAHAM, BAIE D'URFÉ, QUÉBEC H9X 3T5

TÉL: 514-457-3399
FAX: 514-457-9393

LET. DE. COM 12/01/04

SHIP TO: SAMUEL MISSISSAUGA 2360 DIXIE ROAD MISSISSAUGA, ON, CA L4Y1Z7
SOLD TO: SAMUEL MISSISSAUGA 2360 DIXIE ROAD MISSISSAUGA, ON, CA L4Y1Z7

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4107888

CUSTOMER PO NUMBER: N20042	WORK PACKAGE:	CUSTOMER PART NUMBER:	SHIP RUN/LOAD ID: 101068/16	GOV'T CONTRACT NUMBER:
KAISER ORDER NO: 1055568	LINE ITEM: 9	SHIP DATE: 10-SEP-2007	ALLOY: 2024	CLAD: BARE
TEMPER: T3	PRODUCT DESCRIPTION: MILL FINISH_COIL			
WEIGHT SHIPPED: 4385 LB	QUANTITY: 1 PCS EST.	B/L NUMBER: 2014374	GAUGE: 0.0400 IN	WIDTH: 48.000 IN
			LENGTH: 0.000 IN	

Certified Specifications

AMS 4037/RevN
CMMP 019/RevD

AMS-QQ-A-250/4/RevA
CMMP 025/RevR

ASTM B 209/Rev06

Test Code: 1504

Test Results

Lot: 413490A4 Cast 392 Drop 05 Ingot 3

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	68.4 : 69.0 (472 : 476)	47.5 : 47.9 (328 : 330)	16.6 : 17.7

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.22	4.6	0.54	1.3	0.02	0.21	0.01	0.01	0.01	TOT 0.03

ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024 MIN	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

